Guidance for appendix of Phase 1 Report: Breakout table and questionnaire
DRAFT   5/8/06

A. Overall questions for subgroup

1. List the criteria for selection of core indicators and associated strategic objectives (SOW #4)

2. List of strategic objectives for first round (those that will be assembled for the Phase 2 analysis and report) (SOW#4)

3. List of other efforts relevant to these core indicators and coordination strategy (SOW #3)

4. Develop more detailed questionnaire and table of information for each strategic objective / core indicator. (See section B below)

5. Identify which indicators are linked to other CALFED program elements and other non-CALFED efforts. (SOW #8)

6. Identify which indicators have linkages for environmental justice, working landscapes or citizen involvement and education.

7. Compile information and prioritize information gaps and resource needs to complete monitoring, data acquisition, data analysis, information organization and presentation. (SOW# 10) Detailed analysis from Section B to be summarized.

B. Outcome indicator questionnaire and breakout table (Fill out for each core outcome indicator or strategic objective.)

1. **Short description** or key phrase:

2. What **goal(s) and objective(s)** are the outcome indicator related to? What is the rationale or supporting information for how this indicator relates to the goal and objective. (Please provide a reference in the CALFED documents for specific objectives).

3. Documents any **long-term performance objectives** in the CALFED documents that related to this goal and indicator. Document any **short-term performance goals or targets** in the CALFED documents related to this goal and indicator. (provide references) How does this indicator relate to performance goals and targets in the documents?

4. If there is a lack of performance measures or targets in CALFED documents for this indicator – **draft a qualitative (non-numeric) long-term performance**

objective related to the goal and indicators. The long-term performance objective should describe what success would "look like" for this goal and indicator. Provide any supporting reasoning or rationale. If quantitative targets or performance goals are needed – note in the table.

5. **Document any conceptual or quantitative models that are related to this outcome indicator** and describe what factors are or may be influencing the outcome. How complete are they for documenting linkages between the outcome and the controlling factors? Does the conceptual model have references from peer-reviewed literature? Has the conceptual model had independent review? If using a quantitative model, has it been validated and verified? Provide a discussion on the quality and completeness of the conceptual or quantitative model. Provide a graphic (with a reference) of the conceptual model to be included in the appendix.

6. **Provide a list of the major drivers** in the conceptual model that are likely to influence the outcome. Note which ones are uncontrollable factors (by this program) and which are management actions (or potential management actions). For each one, list whether it also has a related conceptual and/or quantitative model related to it. Add to the list any drivers that are identified in the driver conceptual models.

7. **Document any conceptual or quantitative models associated with the drivers.** Similar to question 5. How complete are the conceptual or quantitative models for documenting linkages between the driver (intermediate outcome) and the controlling factors? Does the conceptual model have references from peer-reviewed literature? Has the conceptual model had independent review? If using a quantitative model, has it been validated and verified? Provide a discussion on the quality and completeness of the conceptual or quantitative model. Provide a graphic (with a reference) of the conceptual model to be included in the appendix. Provide a reference list of key documents or scientific papers that would be useful to managers and decision makers who would like more detailed information about the topic.

8. **Do any data exist for the outcome indicator?**
   a. To the extent possible, determine what data exist in past and current monitoring programs that can be used to evaluate the outcome indicator? Who collects the data and where is it stored? Discuss spatial and temporal extent of data related to this outcome indicator. Discuss data availability.
   b. To the extent possible, evaluate the quality of the data to use as an outcome indicator. What field methods are used for sampling, what methods for lab analysis (if applicable). In general, what is known about the Quality Assurance program and the quality of the data to be used?

9. **Do any data exist for the driver indicators?** (See list generated in number 6).
   a. To the extent possible, determine what data exist in past and current monitoring programs that can be used to evaluate the major driver indicators? Who collects the data and where is it stored? Discuss spatial and temporal extent of data related to the driver indicators. Discuss data availability.
   b. To the extent possible, evaluate the quality of the data for the major driver indicators. What field methods are used for sampling, what methods for lab analysis (if applicable)? In general, what is know about the Quality Assurance program and quality of the data to be used.

10. **Review the list** of drivers and outcome indicators. **Are there linkages** for environmental justice concerns, working landscapes, or watershed management (affected by local decisions)? Discuss the linkages for each of those topics.

11. **What are the significant data and information gaps?** The purpose of this is to help prioritize the monitoring and research needs for gathering and synthesizing the information. Provide a list of significant gaps related to the conceptual or quantitative models or the data and data analysis needed related to the outcome and driver indicators. Rank each item on this list as one of the following:
   A: information needed for reporting on outcomes (monitoring data)
   B: information needed for better understanding of the linkages between drivers and outcomes and improvements in the conceptual model. (research)
   C. information needed for reporting on drivers (monitoring data)

12. Provide a **ballpark estimate** of how much it would cost (provide a cost basis – per year, or one time) **to fill the significant information gaps.** Try to provide an separate estimate for each line item and then add them together for each category (A,B,C).

13. With a target date of spring 2007, **estimate how much staff time** would be needed to develop a web-based information organization of conceptual models and data related to outcome and driver indicators (including data acquisition and analysis). What staff time is currently available to work on this (break it out by agency)? What are the resource needs to complete this?

Table Key:

ID: Used to organize and link to table in main report

Key phrase: Short phrase or word to describe outcome indicator (e.g. Water quality at the tap)

Type of indicator: Use key below to select outcome, intermediate outcome or driver type
Key for type of indicator:
OI- Outcome indicator
D/IOI – Driver / Intermediate outcome indicator
D/UF = Driver / Uncontrollable factor
D/MA = Driver / Potential management action

For the next 5: provide a ranking of how much information is currently available related to the indicator:
Key for information ranking
--: Not applicable
0 = no information available
1 = minimal information available
2 = some information available but major gaps
3 = lot of information available but minor gaps
4 = information is fairly complete

- **Conceptual model:** Characterize how much information is available in the conceptual model that documents the understanding of how the outcomes and drivers are related.
- **Quantitative model:** If a quantitative model is available, estimate how much information is available to explain the relationship of the outcomes and drivers, including some assessment of the applicability and quality of the model.
- **Drivers identified**: How much information is available about the drivers that are affecting this outcome? If there are no drivers, use –not applicable.
- **Past monitoring data:** How much historic data are available to evaluate the status and trend of this outcome indicator?
- **Current / future monitoring data:** Are there current or planned monitoring programs or studies that will collect data on the outcome indicator in the short-term future?

Linkages: (check if yes)
EJ: Does this indicator have linkages to environmental justice concerns?
WL: Does this indicator have linkages to working landscapes issues?
WM: Does this indicator have linkages to watershed management such as local land use decisions and land management?

Comments: Provide any brief additional comments to clarify. The main text of the appendix should be used for explanations of any length.

Break-out table for indicator: _____

Key for type of indicator:
OI- Outcome indicator
D/IOI – Driver / Intermediate outcome indicator
D/UF = Driver / Uncontrollable factor
D/MA = Driver / Potential management action

Key for information ranking
--: Not applicable
0 = no information available
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	Indicator description			Conceptual basis			Monitoring data		Linkages			
ID	**Key phrase for indicator**	**Type of indicator**	**Concept ual Model**	**Quant. model**	**Drivers identified**	**Past indicator data**	**Current indicator data**	**EJ**	**WL**	**WM**	**Comments**
WQ1											